Medical practice at the crossroads

GEZONDHEIDSRAAD
Vice-voorzitter

To the Minister and State Secretary for Welfare,
Health and Cultural Affairs
Sir Winston Churchilllaan 362
2284 JN RIJSWIJK

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In a letter of 11 September 1989 (No. DGVGZ/Stabo/JM/U-00136) the then State Secretary for Welfare, Health and Cultural Affairs requested the Health Council to report on the limits to health care.
The Health Council's Standing Committee on Medicine prepared a report on the subject, which I now have pleasure in submitting.

In its introduction the Committee explains why it decided to prepare a report concentrating on medical practice. In order to gain an overview of the field, the staff of the Health Council interviewed some fifty practising physicians and clinical chemists.

As a result of the approach chosen the report gives a clear answer to the question of why medical practice does not always meet the required standard of efficiency. It became evident that in practice there are many problem areas which lie only partly within the medical profession itself. The Committee's recommendations therefore focus on the removal of the many obstacles standing in the way of efficient medical practice.

In the light of this I would draw your attention in particular to the recommendation that the principles of efficient medical practice should be given a definite place in the curricula of medical and health care training programmes. I would also emphasise the recommendations on professional manpower planning, the concentration of certain services and the financial incentives appropriate to the health care system.

For the President of the Health Council,

Dr E Borst-Eilers

Postadres
Postbus 90517
2509 LM 's-Gravenhage
Telefoon (070) 47 14 41

Bezoekadres
Prinses Margrietplantsoen 20
's-Gravenhage

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Report by the Standing Committee on Medicine of the Health Council of the Netherlands

To
The Minister and State Secretary for Welfare, Health and Cultural Affairs

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"Medicine is a delicate balance of art, science and communication"

September 1991, Carole Guzman
President of the Canadian Medical Association

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Terminology

- *Procedure*
  Any action carried out by or at the request of a physician for the purpose of diagnosis or therapy. This also includes a physical examination and the prescription of medication.

- *Efficacy*
  The outcome of a procedure under optimal circumstances: uniform groups of patients, experienced and skilled practitioners and excellent facilities.

- *Effectiveness*
  The degree to which the procedure has the desired outcome in everyday practice. The effectiveness of a procedure has no relation at all to the cost expressed in monetary terms. The distinction between effectiveness and efficacy indicates that in practice factors are operating which can weaken the effect of a procedure; these may be heterogeneous groups of patients, lack of experience and skill among physicians or limited access to the procedure. An effective procedure is efficacious by definition, but an efficacious procedure need not be effective in practice.

- *Efficiency*
  This is the yield produced by a procedure set against the financial cost, manpower and resources required and the time factor. In the jargon the observation, 'the efficiency of care can or must be increased' means that fewer resources should

produce the same level of quality or that the same number of resources can raise the quality of care.

- *Quality*
  The degree to which the objectives set and those achieved are in agreement.

- *Quality assessment*
  The formulation of the goals sought and the evaluation of those obtained in practice in order to assess the degree of agreement between the two.

- *Quality improvement*
  The implementation of activities designed to minimise differences between goals achieved and those sought.

- *Quality promotion*
  The process of quality assessment and quality improvement.

Literature consulted: GR86, Rig88, CBO89, Cas90, NVR90, Har91a.

Summary

1 Introduction

The increasing expenditure required to finance health care is placing the range of services and treatments - the medical procedures paid for by the collectively financed premiums - under severe pressure. This has led the State Secretary to request the Health Insurance Funds Council and the Health Council to make an inventory of procedures the effectiveness of which is demonstrably lacking, marginal or unknown. The present report has been prepared by the Standing Committee on Medicine of the Health Council.

In the view of the Committee, effectiveness relates not only to medical procedures themselves, but also to the application of procedures to patients by doctors; this is the area where the greatest problems arise. The Committee has thus decided to focus on medical practice rather than on the procedures themselves.

2 Background

The changing image of the physician in the second half of this century is described. While physicians formerly wielded a natural authority and usually worked alone, enjoying a high social status and income, the picture is now very different.

The increasing number of treatments available and the greater degree of input by patients now present the physician with changing and more complex choices. He is expected to make efficient choices, in other words to treat optimally, within a fixed time and budget, as many patients as possible. Professional skill alone is no longer sufficient;

teamwork, consultation with colleagues and willingness to participate in review procedures are now essential features. He must be quality conscious and, not least, must treat patients and their families with understanding and patience. The modern physician must be prepared at all times to account for his actions to patients, insurance companies and hospital managements. This demands of the physician a new and more exacting approach to his profession.

The professional organisations have already demonstrated their willingness to adapt. The changes required will be radical and cannot be made from one day to the next. The medical profession however does not have sole responsibility for carrying out these changes; the process must be endorsed by society as a whole.

The quality of health care in the Netherlands remains generally good, but growing complexity, the tightening of the budgetary purse strings and increasing workloads are gradually making themselves felt. In this country as elsewhere we cannot avoid the conclusion that the quality, notably cost-effectiveness, of medical treatment is the subject of public debate. A recent report entitled 'Choices in Health Care' ('Keuzen in de Zorg') published by a Committee appointed to study the question makes recommendations on these aspects, suggesting the adoption of a rational approach. The present Committee seeks in this report to point out the often irrational barriers to efficiency currently in existence, which have so far impeded progress and explain the slow tempo of the implementation of the rational approach.

The Committee has made an inventory of these barriers based on the literature, the experience of its members and discussions by the staff of the Health Council held at the request of the Committee with medical practitioners.

3 Constraints on the efficiency of medical practice

Patient history-taking and the physical examination should remain pivotal in medical practice, followed by *additional diagnostic testing*. Inappropriate use of diagnostic tests is increasing rather than decreasing; both over-use and under-use occur. The skill required to make the appropriate choice from an ever-greater number of diagnostic procedures is underdeveloped. Rational use of additional diagnostic testing is hampered by increasing workloads, poor communication, a hesitant or traditional approach and financial constraints.

The current *fee-for-service payment* undervalues history-taking, talking with patients and physical examination while emphasising diagnostics. This undermines the foundation of medical practice, which is already under pressure from advancing technologies.

The paucity of data on the *effectiveness* of diagnosis and treatment is a major obstacle for quality assessment and the drawing up of protocols. A number of

procedures have been introduced without obtaining proof of their merit. Health insurance companies contribute to this by relying more on the criterion of 'professional usage' than on proven effectiveness when making decisions on whether to provide insurance cover for procedures.

Seldom used and complex procedures should be concentrated in only a few centres, rather than be widely available. However, plans for *centralization* are frequently interfered with by financial and other interests of hospitals and specialists.

Not all physicians attend *in-service training* offered by their professional associations. Moreover, this type of training is not sufficiently related to everyday medical practice and topics such as research on effectiveness and quality are rarely included.

Patients are making greater demands on their physicians. They are increasingly becoming 'consumers' of medical services which means that doctors must choose between 'the customer is always right' and 'the doctor has the last word'. This is a difficult position for the physician, compounded by the fact that he must counteract the sometimes biased information provided by the media.

The trend towards a greater *workload* for physicians - which is partly due to increasing patient demands - can, according to the Committee, be reversed by a more critical and restrained attitude on the part of the physician.

Accountability and peer review based on systematic evaluation are not yet routine among practitioners.

Collaboration between physicians often leaves much to be desired. Most general practitioners *practice alone*; among specialists, where there are group practices or partnerships, the emphasis is usually on practice organisation rather than the development of a common practice policy. Specialists and general practitioners do not always cooperate fully. Specialists now tend to consult each other more frequently but this is often on an informal rather than a structured basis.

Specialists using the same procedures in areas which overlap often come into conflict about who is allowed to do what. Problems are even more pronounced when different types of specialist treat patients with the same disorder differently. Discussions concerning these kinds of '*territorial conflicts*' tend to concentrate on the interests of the specialization rather than on the well-being of the patient.

Medicine is a dynamic profession. The borderlines between disciplines are changing owing to the development of new techniques and ongoing subspecialization. *Manpower planning*, which is largely the preserve of the medical profession itself, takes far too little account of these changes.

4 Conclusions and recommendations

Medical practice has reached a crossroads. The medical profession must make a clear choice: put its own house in order or permit the government, the insurers or hospital management to seize the initiative. The Committee hopes the first option will be chosen, although it is aware that this is no soft option, for it involves the development of new attitudes by the medical profession. This will require time and much patience. Physicians will need the support of their environment: hospitals, patients and politicians and, more widely, society as a whole.

The improvement of medical practice is in the first instance the task of the medical profession itself. The Committee recommends that the professional associations should set up their own *independent quality assurance committees*.

Accountability for medical practice based on systematic evaluation should become routine for doctors. The Committee recommends that the quality assurance committees should develop a procedure for *medical audit* for all specialist partnerships and general practitioner groups and that reviewing outcomes of patient management should be the main aim of these procedures.

Evaluation of the results of complex procedures which are seldom required should be given priority. Should this show *centralization* to be needed, hospital budgets should be re-allocated accordingly.

Basing itself on *effectiveness research*, the profession should design protocols, to be adhered to not as strict rules but used as guidelines for medical practice.

Changing the *remuneration system* so that good medical practice is rewarded will benefit the quality of care regardless of which health care system is chosen for the future.

New technologies should only be adopted if their effectiveness is proven. All new technologies should undergo proper evaluation. The Development Medicine programme of the Health Insurance Funds Council provides a good start for this. It is also the responsibility of the various branches of the medical profession to supervise the careful introduction of new methods.

The Committee rejects the *solitary work style* and applauds government promotion of the formation of group practices in general practice. The Committee believes it desirable that specialists should also change to formalised group practice arrangements. The existing system of partnerships can provide a good starting point, provided more is involved than duty rosters and the financial side. Evaluation of each others' performance and reaching agreement about the type of patient management to be adopted should be central to the new GP group practices and 'new style' specialist partnerships.

It is of great importance that *general practitioners and specialists* realise that cooperation rather than rivalry is what will improve the quality of patient care.

Ongoing subspecialization necessitates *structured collaboration* between specialists in different disciplines, both locally to organize the multidisciplinary treatment of individual patients, and nationally to reach agreement, based on overall data, on the *lines of demarcation between disciplines*.

In the opinion of the Committee patients need an adviser to guide them through the web of specialization. *Strengthening the position of the general practitioner* is emphasised in order to enable him to advise the patient when important decisions have to be made. It is the GP who has the overall picture, particularly when a patient is being treated in more than one specialization or subspecialization area.

The *basic medical curriculum and supplementary training* should be altered to meet changing standards. It is desirable that epidemiological thinking should become part of the programme from the beginning. Both the theory and practice of medical education must be attuned to the importance of self-evaluation and accountability, of peer consultation and the willingness to participate in review procedures, of following protocols and of treating patients and their families with understanding and respect. Collaboration between general practitioners and specialists might be improved by traineeships in eachother's fields during their professional training. Cost-effectiveness and management skills should also be included in the curriculum.

The Committee feels that the *government* should not be too passive. More government intervention is desirable with regard to manpower planning for specialists and to the re-allocation of hospital budgets when facilities are to be centralized. The Committee recommends that stringent regulations should govern the acceptance of new technologies and that government policy should continue to be applied according to section 18 of the Hospitals Act (WVZ). In the Committee's view the government should also make in-service training and re-registration compulsory for practising physicians.

The Individual Health Care Professions Act (BIG) and the forthcoming law on quality offer possible approaches for this. The Committee believes that an active and well-equipped State Health Inspectorate ('Staatstoezicht op de volksgezondheid') is essential for ensuring compliance with the rules of good medical practice. Finally, the Committee would advise the State Secretary to take appropriate action if improvements in quality promotion by the medical profession itself do not proceed satisfactorily.

Chapter 1

Introduction

1.1 Request for a report

In the government position paper on the limits to health care ('Grenzen van de Zorg') the then State Secretary for Welfare, Health and Cultural Affairs put forward the express wish that the medical procedures covered by collectively financed premiums (the range of services and treatments in the insurance package) should be subjected to critical scrutiny with the aim of removing superfluous and ineffective elements. The need for this step was once again demonstrated in the recent report 'Making Choices' ('Kiezen en Delen') prepared by the Committee on 'Choices in Health Care' (WVC91).

In February 1989 the State Secretary initiated an advisory procedure with a request to the Health Insurance Funds Council to prepare an inventory of procedures which should be the subject of critical scrutiny. The Health Council would then provide an indication of the state of scientific knowledge with regard to these procedures; see the request for a report received by the Health Council in September 1989 (Annex A).

1.2 The approach of the Standing Committee on Medicine

It was originally the intention of the Health Council to follow the suggestion by the State Secretary and await the arrival of the list of procedures drawn up by the Health Insurance Funds Council, whereupon it would attempt to make a scientific assessment of the procedures in question. As time passed it became clear, however, that the Health Insurance Funds Council was more concerned with the method of assessing procedures

than with the procedures themselves. Following consultation with that body, the Health Council decided to deal with its own request for a report independently of that submitted to the Health Insurance Funds Council. Accordingly the Standing Committee on Medicine (at that time known as the Board of Advice and Consultation and referred to in the present report simply as 'the Committee') assumed responsibility for dealing with the request for a report in September 1990. The members of the Committee are listed in Annex B.

The request for a report submitted to both bodies reveals a requirement for a specific and full list of procedures the effect of which is demonstrably lacking, marginal or unknown. However, the Committee chose to adopt a different avenue of approach. It believes that it is not only the procedures themselves which are ineffective or barely so, but certain of their applications as well. A procedure may be effective in the case of one category of patients but not in another. It is the physician who brings the patient and the treatment together. In effect it is thus the question of whether the physician chooses the appropriate procedures which is at issue. For this reason the Committee decided to emphasise medical practice as a whole in its report rather than simply the procedures themselves.

The Committee believes it to be the task of the medical profession to select the procedures which are effective for particular patients or groups of patients, since obviously the physician is the expert in this field. Moreover, it is desirable that the profession should be involved in the practical implementation of change. A list of ineffective or poor procedures imposed from above is likely to be rejected by the medical profession as a 'foreign body'.

It is the view of the Committee that on average health care in the Netherlands may be qualified as good to very good but increasing complexity, tighter budgets and increasing workloads are gradually taking their toll. As in other countries, we in the Netherlands must realise that quality improvement and the cost-effectiveness of medical practice must be addressed. As is the case elsewhere there are considerable differences in this country between the methods employed by individual physicians and in some cases treatment is inefficient, superfluous or pointless.

The present advisory report is descriptive in nature. The Committee begins with a broad outline of the changes which have taken place in the image of the physician in recent decades and points out a number of obstacles to meeting the current image of the ideal practitioner. It presents a number of conclusions and recommendations which aim to support the process of change already set in motion by the medical profession itself and to reinforce developments in this area.

Chapter 2

The context

2.1 Introduction

The Committee wishes to confine its remarks to everyday medical practice. After all, the medical 'shop floor' is the place where the selection of particular procedures and treatments must be made.

Dutch society in 1991 requires of its physicians that they make efficient use of the instruments at their disposal. A doctor is expected to treat as many patients as possible to the best of his ability within fixed time and budgetary limits. Providing efficient treatment requires that choices are continually being made. This situation gives rise to a number of questions. Is the physician sufficiently well equipped in academic, technological and social terms to make efficient choices and has he been adequately prepared mentally for this task during his professional training? Does his environment - hospitals, patients, politicians and in a broader sense, society, in short everyone - have a sufficient understanding of the complexity of the decisions facing the physician? (Mei90) and do we realise that the problem of choices must be resolved not by the physician alone but that it requires an effort by us all?

2.2 The 'ideal' physician

The image of the physician roundabout the middle of the present century may be outlined as follows. He was invested on all sides with a natural authority. Input by the patient was virtually unheard-of. The physician was looked up to because of his knowledge and

skill and he enjoyed a high social status and a concomitant income. Working alone was the norm and there was very little accountability. There was little pressure on the physician to economise in the delivery of health care.

This image has now been consigned to history. Professional skill alone is not enough. The physician is expected to work efficiently and this is no mean task. A critical approach to his own performance and a flexible attitude to technological advances, which is at the same time critical, demand considerable scientific and social insight. It is necessary for the physician to communicate with patients and colleagues in an atmosphere of openness and he is continually required to account for his actions. The image of the ideal physician in the year 1991 reflects a range of expectations deriving from society.

2.2.1 *Skill*

A major requirement is that the physician is skilled in his profession, the basis for this being his professional training and knowledge. What was learned during his medical training is not sufficient because rapid advances are being made. Medical knowledge is moving ahead continually and this means that the physician must be capable of acquiring and assimilating new knowledge and, indeed, be willing to do so and he must be flexible enough to abandon outdated ideas. In other words 'education permanente' is essential to sound medical practice.

It is equally important that the physician should possess technical skills: whatever he does must be done well and he must be prepared to acquire new skills where necessary. He must be willing to build up a body of experience and to learn from experience.

However, as Eddy expressed it: "it is not enough to do the thing right; it is also necessary to do the right thing" (Smi91). For instance, a physician must not burden a patient with unnecessary tests however well these may be carried out, but on the other hand he must not fall into the error of carrying out too few diagnostic tests, as this could lead to his missing something important. In view of the enormous increase in diagnostic possibilities it is no easy matter to make the right choices in this respect. The same applies in fact to the initiation of treatment: the physician must not select an inferior form of treatment, nor must he decide on a treatment more severe than is justified by the ailment.

Protocols and guidelines are often developed to assist the physician in taking difficult decisions such as these. One disadvantage, however, is that they are based on the average case and concern groups of patients. If they are applied too strictly the physician loses the freedom to undertake a form of treatment of his own focussed on the individual patient and unnecessary constraints are placed on the freedom of choice of the patient (Van89, Ros91). Thus the physician is expected on the one hand to work as far as possible according to protocols and adopt a more or less conformist attitude. On the

other, he is expected to be aware of the relative nature of such guidelines and he should not hesitate to deviate from them if there are reasonable grounds for doing so (Ber91a).

2.2.2 *Quality and review procedures*

The attitude of the physician to quality promotion in general is of some importance. He must be capable of evaluating his own work, be prepared to do so and make changes where necessary. However, individual experiences are not sufficient for this purpose. Medicine has become so complex in recent decades that the physician requires others as a frame of reference, a circumstance which places a premium on his communication skills.

Peer consultation can make a contribution to quality improvement. The physician will need to take the time to listen to colleagues and not hesitate himself to consult other physicians if he feels that his knowledge may be inadequate in a particular area. General practitioners are expected to work as members of a team in a group practice and this is in fact expected of specialists as well. The physician must continually question whether he is the appropriate medical practitioner for the patient in question in the given circumstances. He should have a good understanding of his own limits and where necessary refer patients to colleagues.

In addition to all this the physician must be prepared to submit to review procedures in a broader context. He is increasingly expected to sit examinations in order to assess his knowledge and skills before he can register as a GP or specialist. And in the near future established physicians may be required to take periodic tests of their knowledge and skill in order to qualify for re-registration.

The physician will have to be prepared to be continually accountable to the board of the institution where he works and to insurers, since these are the groups which require him to use the instruments at his disposal as efficiently as possible.

On the other hand the boards of health care establishments are dependent upon the input of physicians who are increasingly required to make a contribution to policy, their input being of some importance to the quality of care.

Moreover, doctors in health care establishments are asked to participate in large numbers of meetings and sit on all manner of committees. The consultations may concern patients requiring multi-disciplinary treatment (for instance, oncology consultations) or discussion of medical matters of a more general nature, such as take place in the infectious diseases committee, the antibiotics committee, the medication committee, the faults, accidents and near-accidents committee (FONA Committee) or the medical ethics committee, all of which are concerned with the quality of health care.

2.2.3 *Dealing with patients*

In the face of the stream of information reaching the physician, and the requirements of technical competence and quality-oriented health care institutions, he must not lose sight of the object of it all: care of the patient. The patient must be at the centre of all the physician's activity. This means in the first place that the physician must take time to listen to the patient and talk with him. There is the expectation that the doctor will provide the patient with expert advice and explain to him what he intends to do and why, and what he believes the problem to be. In order to do this he must have mastered the rudiments of didactics. He must be able to assess how best to approach each new patient if he is to get his message across. It will often be necessary to maintain contact with the family, either because the family wishes it or because the patient's condition (seriousness of the disorder or inability to understand the situation) demands it. This requires the physician to have a considerable knowledge of human nature.

The way in which the patient and his family are approached must be calm, full of understanding and pleasant, even when the doctor is under pressure from tight schedules or is nervous or irritable. He must respect the patient's autonomy and accept his criticism. If a patient requests a second opinion the physician must not become defensive or self-doubting and he must on no account reproach the patient.

In spite of all these expectations and the long working hours put in by doctors, society believes that in 1991 the physician may not expect an exceptionally high level of remuneration.

2.2.4 *Change*

The Committee concludes that the image of the physician and the professional content of his work have undergone a metamorphosis. What is expected of him in 1991 is quite different from expectations fifty years ago, a circumstance which demands a new attitude on the part of the medical profession. This idea is not new; it is in accordance with the findings of the Dekker Commission which published its report in 1987 under the title 'Willingness to change' (WVC87).

The medical profession has on several occasions indicated its willingness to adapt to the changing situation, witness the publications and statements made at congresses by the National General Medical Practitioners' Association (LHV), the Royal Dutch Medical Association (KNMG) and the National Specialists' Association (LSV) (LHV88, KNMG89b, LSV90). The willingness to address the issue of change was also reflected in the Five-Party Agreement concluded in 1989 (VPA89).

The process of change will be radical and far from simple. The Committee therefore believes that people should appreciate that changes cannot take place quickly. The community and the organization of the health care system are still largely geared to the old role patterns. There are many obstacles still which limit the functioning of family doctors in accordance with the new 'ideal' image, some of these in areas in which they themselves have very little influence. It should not be thought that responsibility for the process of change rests entirely with the medical profession.

2.3 The method employed by the Committee

The Committee commenced its activities with a field study carried out by staff members of the Health Council with the aim of charting medical practice as it is at present. This study involved a survey of the problems and obstacles standing in the way of 'ideal medical practice'.*

That report reflects the feelings and views of practising physicians. The comments it cites can partly be supported by objective data; they are to some extent an expression of feelings of dissatisfaction and impotence. The Committee does not wish to make a value judgement in this respect. It simply wishes to indicate that such feelings exist and that they have a considerable impact on health care in practice, and, in so doing, on the chance of success of the changes needed in the operation of medical practice.

The next step was for the Committee to make an inventory of key points to be studied if 'ideal medical practice' is to be given concrete form (Chapter 3); this was based on the results of the field study, a study of the literature and the experiences of its members. The Committee believes that resolution of the problem areas uncovered should not be sought in depriving the medical profession of its decision-making competence. Preference must be given to solutions which enable physicians to make better decisions (Chapter 4).

Owing to constraints of time and manpower, the Committee has not sought to be definitive in its report.

2.4 A glance across the national borders

The current situation in medical practice in the Netherlands described by the Committee is found in all Western nations. The examples given here are but a few of the many contained in the literature illustrating the need for change.

Five years ago Cassell published the article: 'The changing concept of the ideal physician' (Cas86), in which he describes - against the background of more general cultural developments - the radical changes which the image of the physician has

* In the original Dutch publication the report of the study had been included as an annex.

undergone in the second half of this century in the United States. He believes the ongoing influence of science and technology on both physician and patient to be crucial.

In a publication entitled 'The Challenge', Eddy recently gave expression to the general desire to bring medical practice into line with the requirements of the present day, and addressed the necessity for this (Edd90a). On the basis of research into variations in medical practice he concludes that the old belief that 'whatever a physician decides is, by definition, correct', no longer applies. This implies that a patient may consult different physicians, who tell him different things and prescribe different treatments. While it may be true that not all these variations are of equal weight, it is important to be able to distinguish just when it may be vital to select the right approach. Andersen and Mooney deal with this topic in somewhat more detail in their book, 'The challenge of medical practice variations', reaching the same conclusion (And90).

Beresford, who interviewed twenty-five practising Canadian physicians (a study bearing a strong resemblance to that carried out at the request of the Commission), concluded that doctors are willing to adapt to the requirements of the present day (Ber91b). In practice, however, they are weighed down by a great deal of uncertainty in making choices: uncertainty deriving from a lack of scientific data, uncertainty about how the wishes of the patient should be met and uncertainty about the application of protocols in specific situations. Thus it becomes obvious that precisely in those areas where physicians are expected to demonstrate the will to implement change, they lack the means to put these changes into practice.

Finally, in a recent article entitled 'Should the health care forest be selectively thinned or clear cut by payers', Welch emphasizes the responsibility of the individual physician in making health care choices (Wel91). The burden of his argument is that the creed of the medical profession, 'Do whatever is best for the patient', is too often wrongly interpreted as 'do everything possible'. He recommends that the medical profession should take stock of the situation and adopt measures of its own: if they do not, medical decision-making will be dictated by the insurers.

Chapter 3

Theory and practice of medicine

3.1 Introduction

In this chapter the Committee initially formulates in broad outline what it understands by sound medical practice. It then explains that it is necessary to take stock of the situation in medical practice because everyday experience and a study of the literature show that there is a gap between the ideal and reality. Finally, it lists specific points which are worthy of attention.

3.2 Sound medical practice

The sketch of the ideal physician given in the previous chapter indicated some characteristics of sound medicine: competence, a quality-oriented approach and the ability to treat the patient with understanding. In a recent article published in the Annals of Internal Medicine, Brook articulated in striking fashion what the Committee too understands by sound medical practice (Bro91a):

"we need to pay attention to three components of quality: the appropriateness of care; the technical competence with which a particular procedure is carried out; and human dignity. When you or I visit a doctor, we want to be assured that we will receive the services that we need (that is the application of the service is expected to produce more health than harm) and, likewise, that we will not receive services that we do not need. That is what is meant by appropriateness. When we receive a procedure we want it to be done skillfully so that the best outcome is obtained (for example, the roentgenogram is exposed

correctly so that the lesion is recognized or the arteries are sewn together carefully so that patency for about 10 years is assured). Finally, we all want to be informed about what is being done and to be treated with dignity."

3.3 The practical situation

Variation in the application of procedures is a worldwide phenomenon which has been recognized for some years (Cha87, Bun90, And90, Wen89,90, Phe90, Edd90a, Rya91). It also occurs in the Netherlands (KNMG89a, Mac90, Spe90, Wes90, Cas91, Har91b,c,d, Pos91).

The fact that one doctor uses a particular procedure more often than another gives rise to the question of who is right. The physician who endeavours to be sparing in the application of a procedure? Or the one who applies it on a large scale? It is not always possible to answer such a question. For example, for some disorders there is more than one diagnostic path which can be followed and more than one form of treatment available, without there being demonstrable evidence that one is better than the other. Thus, the presence of variations does not necessarily mean that the treatment is inadequate. On the other hand, the absence of variation need not mean that the treatment is automatically sound. The inappropriate use of certain procedures right across the board cannot entirely be ruled out.

The practical application of a limited number of fairly clearly defined procedures has been studied in the Netherlands. The outcome was in all cases that there is evidence of variation in the application of procedures. There are no precise data about practical applications for the other procedures and therefore the degree of variation is unknown, but the Committee has no reason to believe that there is an absence of variation in the areas not studied. On the contrary, there are grounds for believing that variation is the rule rather than the exception in medical practice.

The Committee interprets a high degree of variation between individual doctors as an indication that quality also varies. It is important to determine why practice demonstrates such a degree of variation as well as those cases in which this has an impact on the outcome of medical practice.

3.4 Points to be stressed

The report entitled 'Making Choices' ('Kiezen en delen') prepared by the Dunning Commission recommends that the medical profession should separate the wheat from the chaff (WVC91). The authors make a series of recommendations on rational measures designed to improve medical practice. The question is, however, whether the necessary steps can be realized. The Committee which prepared the present report distinguishes a

number of obstacles, which are often less than rational. These will be dealt with in this section of the report, the obstacles being described individually. This may suggest that the various problems are isolated, but this is of course not the case; there is rather a whole complex of factors at work.

3.4.1 *The use of additional diagnostic testing*

The Committee defines additional diagnostic testing as all diagnostic procedures which do not fall into the category of patient history-taking or physical examination; in other words, laboratory tests and functional tests such as the electrocardiogram (ECG), the electroenchephalogram (EEC), pathological tests and diagnostic imaging (x-ray photographs, ultrasound screening, and computer tomography (CT-scan).

Much additional diagnostic testing is simple and relatively cheap so that the physician is able to use it on a large scale. But for this very reason such 'simple technology' is quite expensive, accounting for approximately 12% of the health care budget (WVC91, page 140).

As in other Western countries, the Netherlands is guilty of 'over-use' of diagnostic procedures. The Committee has gained the impression that in spite of the attention devoted to this matter (Vri88, Eis89, GR89, Kas89, Lam89, Woo90), both inappropriate use and 'over-use' are gaining ground rather than diminishing. By inappropriate use is meant the fact that the diagnostic procedure employed is not suitable for providing an answer to the question put. Over-use occurs when the diagnostic procedure employed is superfluous because the practitioner requesting it already has sufficient information or in cases where the diagnostic procedure can have no purpose because there is no effective treatment for the disorder discovered (GR89). The often extremely intensive follow-up of patients who have been treated for certain forms of cancer is an example of the latter.

There is however also 'under-use' of diagnostic procedures; this occurs when diagnostic procedures are not utilized in cases where they should be. For instance, some general practitioners never make use of the facilities offered by the general practice laboratory when, by doing so, they could avoid a referral to a specialist. Since physicians have been asked to make economical use of certain facilities there is a growing tendency to use cheaper alternatives in cases where a more expensive type of diagnostic instrument would be cheaper in the long run and therefore more efficient. An example is the use of conventional radiodiagnostic methods, while Magnetic Resonance Imaging (MRI) is in fact indicated for the patient in question. A whole array of relatively cheap diagnostic instruments may first be employed, including X-rays (possibly using a contrast) and ultrasound followed by a CT-scan before it is finally decided that MRI is necessary after all because the disorder in question can only be diagnosed satisfactorily using that technology (for instance, certain types of cancer of the spinal column).

Furthermore, diagnosis using MRI is only to a limited extent available in the Netherlands.

The inappropriate use of diagnostic testing has a variety of causes, chief of which is the almost daily increase in the diagnostic technologies available. Many physicians do not have the necessary skill to make the most appropriate medical decision in the face of the wide selection on offer. This requires knowledge of the value of the test, understanding of clinical epidemiology and insight into the natural course of diseases; medical practice demonstrates certain shortcomings in this area. Other obstacles to the rational application of diagnostic procedures are to be found in the organization of the work of the physician (lack of time, poor communication), or are concerned with the mode of work (an uncertain manner (Kas89)), a traditional approach to medicine (Eis89) or financial interests (Hem90, Hil90, Kra90, Wri91; see 3.4.4 and the yellow annex). The 1989 annual report published by the Health Council contains more information on the inappropriate use of diagnostic testing (GR89).

3.4.2 *Treatment*

It is only necessary to glance at a few issues of the Netherlands Journal of Medicine in order to discover that there is a great variety of treatments available for many disorders. This can be largely ascribed to lack of know-how. Not in the first instance the lack of know-how at the level of the individual physician, although this plays a role as well (3.4.6), but a fundamental lack of basic scientific data on the efficacy of certain forms of treatment. Many types of treatment are introduced into normal medical practice without their effectiveness having been conclusively demonstrated (Fee86, She88, Edd88, Sox89, Ban 90, Hei90, Lin90, McP90, Wen90, Bro91a, Bro91b, Gin91, Smi91, WVC91). In some cases the efficacy of the treatment has been established under ideal conditions with a highly selected group of patients, but this does not mean that it will be effective in everyday practice, with other groups of patients and with other indications. There are also numerous disorders and infirmities which disappear of their own accord, but for which the patient calls the doctor. In these cases most physicians will employ some form of treatment, if only because they learned in their medical training that it is always a good idea to 'do something for the patient'.

3.4.3 *The introduction of new procedures*

There are a great many reasons for the too hasty introduction of new diagnostic and therapeutic methods. It may be that there is no treatment for a certain disorder, or that the existing treatment is inadequate. In such cases a new procedure receives the benefit of the doubt, especially if the underlying theory seems convincing and there is no

satisfactory alternative available for a very insistent patient. In some cases a particular treatment or medicine may have proved effective in comparison with the alternative of taking no action, but there may be no effective comparison with existing, generally accepted alternatives. The influence of industry on the introduction of new procedures is substantial. Not every new pharmaceutical product, diagnostic instrument or medical appliance is necessarily an improvement, in spite of the view propagated by the manufacturer that this is the case.

Once medical procedures have found their way into everyday practice, scientific interest in them tends to relax. The insurers contribute to this circumstance, since in establishing whether a procedure is eligible for inclusion in the health care package they continue to place more emphasis on the criterion of 'professional usage'* rather than on proven effectiveness. A situation of this type creates plenty of opportunity for 'schools of thought' and 'faith' in particular procedures rather than a sound scientific background as the basis for medical practice (Eps84).

3.4.4 *Financial incentives*

The method of funding the health care system inevitably affects medical practice (WVC87, Wie88, Lee89, Spa89, Hem90, Hol90, Kra90, Fli91, Wri91).

The Committee is of the opinion that the current fee structure generates financial incentives which have a counterproductive effect on the quality of medical practice. Ideally, extensive patient history-taking - listening to a patient and talking with him with professional skill - and a skilled physical examination should receive the greatest emphasis. However, for a number of reasons physicians are increasingly relying on technology in establishing a diagnosis rather than on this fundamental tenet of medical practice. The present system of remuneration, where 'action'** is amply rewarded while reflection, talking to the patient and physical examination are poorly paid, provides a stimulus to this undesirable development. It occurs not only in the case of specialists who can send in accounts for the procedures they carry out (self-referring specialists (Hil90)), but also in the case of physicians who perform few procedures which are directly billed, such as specialists in internal medicine and rheumatoid complaints. The work of this group can however come under financial pressure, albeit indirectly because their income is largely determined by the number of referrals (read: patients) they are able to process. In such cases there is a tendency to rely on diagnostic procedures which can be referred to others such as the clinical chemist or the radiologist, instead of making intensive use of patient history-taking and the physical examination. The pressure of

* This means that a procedure which is generally accepted among fellow-practitioners is almost automatically included in the health care package.

** 'Action' here means carrying out additional diagnostic testing.

work to which physicians are frequently exposed provides another reason for this (3.4.11).

3.4.5 *In-service training*

The physician must keep up-to-date in his field. Keeping up with the medical literature often does not receive the desired priority owing to pressure of work (3.4.11). Moreover, the enormous growth in the production of publications in the last few decades very often makes it difficult for the physician to see the wood for the trees (Hay86a,b,c, Hay90). The professional associations have the task of assisting physicians in this respect (Mei90). They organize numerous refresher courses with the aim of furthering the professional skills of their members. The Committee believes this to be desirable, but there are several problem areas.

Participation in in-service courses may be a moral obligation but it is not a statutory one. In practice, it has been demonstrated that some physicians attend regularly, some occasionally and some not at all. This may again be a function of the pressure of work (3.4.11), but the professional attitude of the physician plays a part as well.

Although the Committee believes it important for physicians to keep abreast of new scientific developments in their own field, it takes the view that experimental medicine receives too much attention in comparison with further training focussed on everyday practice.

Training in research on effectiveness and quality appears infrequently in training programmes. The Committee believes that this type of research should develop from an activity *for* physicians, as is now largely the case, into one in which physicians themselves *participate* (Gum88, Rel90, Bro91a). The medical profession needs to be more closely involved (3.4.6), but physicians are generally poorly prepared for such participation (RGO88).

3.4.6 *Self-evaluation*

In making the plea in the previous section for more involvement by practising physicians in research into effectiveness and quality, the Committee would by no means wish to suggest that every doctor should become a medical researcher who treats every patient as a guinea pig and the subject of research; it does however suggest that the physician should subject the outcome of his treatment to systematic evaluation, discuss his work frankly with colleagues and, where necessary, modify his approach.

However competent the physician may be and however well-organized the care system and however efficient in-service training, the real quality of medical practice will be determined by its outcome (Don88, Ell88, Roo90, Wen90, Bro91b). The outcome in

the broader sense: not only the alleviation of pain, illness, discomfort and disquiet, but also the complications and side-effects of diagnostic procedures and treatment. Measuring the outcome of medical practice is far from simple. Few physicians are sufficiently trained in the systematic evaluation of their treatment, with the resulting danger that they will simply base their judgement on those aspects which are easily quantifiable. The result is a one-sided picture.

3.4.7 *The patient*

The changing attitude of the 'public' to health and illness has an enormous impact on medical practice. The increasing ability of the patient to express his views may be deemed to be a great good, but there is also a down side. The patient is becoming a consumer *pur sang* and the term consumer medicine is used to indicate that it is not so much the medical imperative but the wishes of the patient which determine medical practice. The public makes more, and more stringent, demands than in the past. People visit the doctor at an earlier stage and request more frequently and earlier that they be referred to a specialist, not only when symptoms have manifested themselves, but also to prevent illness (Kro85, Arm91). People wish to be treated for complaints without symptoms, such as gall stones discovered incidentally, and they do not hesitate to seek a second or third opinion if symptoms do not disappear quickly enough ('shopping around'). An additional factor is that the patient expects the doctor to treat him without regard to the cost involved; after all, in the view of the patient this is what he pays health care contributions for (Van89, Mei90, Gev91).

Sickness and health enjoy much more public interest than was previously the case (Cas86). Information provided by the media has made a considerable contribution to patient independence. However, the way in which such information is furnished is open to criticism. The medical columns in newspapers and weeklies are frequently inaccurate, superficial, incomplete and open to influence by advertizing (Con91). The media emphasis on the modern man or women who is invariably fit and free of pain or other symptoms also lacks balance. Anyone who does not conform to this image should consult a doctor. Information on new methods of treatment would benefit from being more subtle and balanced, with emphasis not only on the advantages but also providing information on costs, availability, complications and side effects. Otherwise the public will continue to make increasing and unrealistic demands of medical science.

The physician is regularly placed in a situation where he must choose between 'the customer is always right' and 'the doctor has the last word'. In making such difficult choices he still receives too little support from his environment: the institution in which he works, his professional association, government and the community.

3.4.8 *Individual practice*

The individual method of working so characteristic of the physician in earlier days is, in the view of the Committee, not in keeping with the demands of present day life. Despite this, the individual practice is the most frequently found organizational form among general practitioners: in 1989, 69% worked in individual practice and 31% in some form of structured cooperative arrangement (group practice, 'home team', health centre) (TK91b). And although specialists usually work in partnerships, the individual specialist practice has not entirely vanished from the scene. Moreover, working in a partnership does not necessarily guarantee the degree of collaboration the Committee believes desirable. In many partnerships collaboration is limited to the organization of the practice (duty rosters and financial matters) and the individual physicians are free to carry out their own policy on patient management.

This is not to say that the Committee believes that physicians working individually avoid consultation and collaboration in medical matters. But consultation and collaboration generate insufficient mutual obligations. The Committee has even more formalized and structured forms of collaboration in mind, in which there is scope for mutual support, feedback and peer review.

3.4.9 *The role of the general practitioner and the interaction between general practitioner and specialist*

The number of specialists and specializations has grown enormously since the Second World War. Specialization continues to increase; from specializations sub-specializations have grown up and the process continues. This means that the role of the general practitioner tends to be forced into the background.

The Committee believes that the patient needs an 'advocate' and guide to help him find his way through the maze of the specialist world. The general practitioner is the obvious person to protect the patient and to advise him in making important decisions. In fact, in the case of patients with more than one disorder - an increasing phenomenon with aging - he is the only person who can maintain an overview of how the patient is being treated, certainly in cases where there are one or more specialists or subspecialists involved.

This fact began to be appreciated about a decade ago (TK83a,b) and the government decided in the course of the 1980s to provide funding to strengthen primary health care: reducing the size of practices, creating group practices and increasing the level of expertise of practitioners (TK87, 88b, 89, 90, 91b).

Family doctors themselves have made every effort to achieve the goals set. Their numbers grew between 1983 and 1990 from some 5700 to nearly 6400, structured collaborative arrangements have increased (even if progress is slow, see 3.4.8), the average practice size is diminishing (TK89, 90, 91b) and the Netherlands Society of General Medical Practitioners (NHG) is preparing guidelines for the mode of work of the general practitioner (NHG89). The Committee welcomes these developments while noting that they can only be fully effective if there is optimal cooperation between the general practitioner and the specialist, something which is not always the case at present. Opportunities for telephone contact with the specialist are under-utilized by general practitioners, partly because specialists are not always amenable to this. Referrals by general practitioners are not in all cases clearly formulated and where they are the specialist does not always act in conformity with the question posed by the general practitioner (Ker90, Eng91). Feedback by the specialist is not optimal in all cases. The complaint by general practitioners in this respect is not so much that the content of the specialist's replies is wanting but that the specialist keeps them waiting for weeks or even months for his opinion and the treatment given to the patient referred to him (Wes91). A complicating factor is that the two parties often do not agree about the demarcation of their respective areas of competence. There is often no consensus about the admission to hospital of patients with certain disorders and this may lead to friction between general practitioners and specialists. GPs believe that patients are frequently treated for longer than is necessary by specialists and specialists think that the expertise of general practitioners in certain areas is inadequate, which leads them to delay in referring the patient back to the GP. Lack of insight among specialists into the operation and mode of work of GPs (Gil87, Jac90) and the same lack of insight on the part of the GP vis-a-vis the specialist is in the Committee's opinion a major cause of the lack of communication between primary and secondary health care.

3.4.10 Cooperation between specialists and lines of demarcation

An increase in the number of specialists and growing specialization make intra-disciplinary and inter-disciplinary consultation and cooperation between specialists a necessity. The Committee finds that in recent years willingness to participate in peer consultation has grown, but that such consultation is often of an ad hoc nature. A more systematized and structured approach would be more effective.

In addition to this the Committee has observed problems in the demarcation of areas of competence between specializations. Although rivalry may constitute a stimulus to progress and quality improvement, there are problem areas between specializations which lead to competition and rivalry of a type which does not always place the interests of the patient in a paramount position.

Tensions between the specializations may occur when the same procedure is carried out by specialists from different disciplines. For instance, imaging was previously the field of the radiologist, but today ultrasound equipment is part and parcel of the range of apparatus used by specialists in a wide variety of disciplines. Other examples are provided by endoscopy of the alimentary canal which may be performed by specialists in internal medicine, gastro-enterologists and surgeons (Mee91); the treatment of fractures which may involve tensions between general and orthopaedic surgeons; and surgery of the spinal column which is the field of both orthopaedic surgeons and neurosurgeons. Training boards and the professional associations still pay too little constructive attention to the problem of the demarcation of competencies and even in cases where nationwide agreements are made their implementation at the local level is often less than adequate.

In cases where more than one method of treatment for a disorder is possible and the alternatives lie in different disciplines, tensions and frictions may arise between the disciplines. Striking examples are provided by the treatment of patients with gastro-intestinal disorders, where there is a choice between the use of drugs by the specialist in internal medicine and operation by a surgeon; or the treatment of atherosclerosis-related disorders where there is an area of tension between treatment using drugs by the cardiologist, PTCA by the cardiac surgeon or a coronary by-pass operation (CABG) by a surgeon. Since the alternatives lie in different disciplines, research into the effectiveness of the various methods of treatment is especially difficult.

Apart from this, the introduction of new techniques and the rapid growth of specialization are causing the lines of demarcation to blur. Some areas of specialization are shrinking to make way for the expansion of others and this is of course difficult to accept for the specialization which is losing ground. There is always the danger that specialists will go to almost any lengths to keep their own field in full operation; this may not always be to the advantage of the patient. General surgery, ear, nose and throat practice and clinical neurophysiology are examples of specializations which are losing ground.

The situations outlined above are giving rise to the inclination to put the interest of the specialist or the discipline before that of the patient. The examples given are intended as illustrations only; the Committee has made no attempt to make a complete inventory of the demarcation problems between specializations. It is presumed that comparable difficulties also occur in the other disciplines as well.

3.4.11 Pressure of work

Physicians are required to work to tight schedules, a working week of 60 to 80 hours being no exception. According to the Committee this is detrimental to the quality of

medical practice. In the face of such pressure laboratory tests and additional diagnostic testing tend to take priority over taking the patient's history and the physical examination, while in-service training, self-evaluation and peer contacts are neglected as well.

The demands made by the patient of today are a major cause of the excessive workload of the physician although other factors such as the method of remuneration, practice organization and professional manpower planning also play a role. The spiral could be broken if physicians were to adopt a more rational, restrained approach.

3.4.12 *Professional manpower planning*

The regulation of access to the profession for new practitioners has to date been largely a matter for the specialists themselves. In practice there are strong divergences according to the discipline in question and the Committee believes that the system does not operate optimally, with tradition and the interest of the professional group prevailing and the planning being insufficiently geared to the needs of the health care service. Furthermore, little attention is paid to the question of shifts in emphasis occurring between the disciplines, either now or in the future. There is a tendency for new developments which will guarantee the growth of the discipline to be included in the planning but for contingencies for a shrinking specialization to be ignored. Moreover, long-term planning is no simple matter; this requires an independent assessment of the situation over the entire medical profession, a sound knowledge of demographic trends and the consequences of these for the health pattern of the population.

3.4.13 *Distribution and concentration of services*

The wide distribution of facilities over all hospitals in the Netherlands serves to increase access, but in some cases it can lead to an undesirable fragmentation of knowledge and skills. In order to build up and maintain an adequate body of know-how and experience a steady flow of patients requiring the procedure in question is necessary. In the case of rare disorders which are difficult to diagnose and non-routine surgery it is skill and experience which are important rather than a wide distribution of the service.

The Committee believes there is evidence of a too wide distribution of some procedures which has led to the provision of less than optimal health care. The medical profession has given too little thought to the distribution and concentration of services and to the development of an adequate policy to meet needs in this area. At the moment when debate on the subject is taking place the interests or financial requirements of physicians and hospitals often prevail.

Chapter 4

Conclusions and recommendations

4.1 Introduction

Medical practice stands at the crossroads. The profession has a choice: to set its own house in order or allow the initiative to move to government, the insurers and hospital managements. The Committee advocates the first of these options, believing it to be essential that the medical profession should immediately take steps to remove existing obstacles to the efficient operation of medical practice. If the profession fails to do this others will inevitably seek to prescribe what the physician should or should not do. This is in the interest neither of the physicians themselves nor of their patients (Alp87, Ber87, Coo91, Bri91, Wel91). Sound medical practice demands a high degree of skill; it is the physician who should possess such skill, for he has daily contact with patients and it is he who is best fitted to determine what is good medical practice and what is not.

The situation demands the total commitment of the medical profession and the medical schools. Some professional associations have started to develop a policy on the quality of health care, albeit of a hesitant and arbitrary nature. A more systematic approach is urgently required if a genuinely sound policy on quality is to be created.

4.2 Towards improved medical practice

In the following pages the Committee sets out the steps needed to get the improvement of medical practice under way. It is concerned with the broad outline; filling in the details is

the task of the profession itself, with the aid of government and the insurers where necessary.

The Committee does not rule out the fact that its proposals will entail financial consequences and possibly even financial sacrifices. This aspect is, however, not considered in the hope that the government, the medical profession and the hospitals will be prepared to accept such consequences since the whole exercise is in the interest of improving the quality of health care services.

4.2.1 *Evaluation of medical practice*

Systematic evaluation and frank discussion of the outcome of his actions with peers (4.2.3) should become part of the daily routine for the physician. This is a major precondition for the improvement of medical practice. Nevertheless, it is not as easy as it may at first sight appear (Nix90, Smi90, Ber89).

Uncertainty about how and where to begin with such evaluation has a paralyzing effect on the individual physician, even if he is clearly aware of the need for it. It is the responsibility of the medical profession to remove this uncertainty. The professional associations should assist the individual physician by providing in their further training courses the instruments for initiating a systematic approach and they will also need to indicate where priorities lie (Cas90, Mei90).

The Committee believes that every professional association should possess an independent quality committee, the establishment of such committees being obligatory. The committees should be chiefly concerned with evaluation and the promotion of professional medical practice.

4.2.2 *Effectiveness research*

The lack of data on the effectiveness of major areas of medical practice is the greatest obstacle to improving the quality of that practice. It is essential that such data should be acquired. Separating the wheat from the chaff requires the cooperation of physicians at grass roots level, since it is they who carry out the procedures and are confronted with their positive and negative outcomes (Ebe90, RGO90).

The results of these studies of effectiveness should where possible be translated into protocols (standards or guidelines*) for medical practice in well-documented situations. Willingness to work with protocols will be greater if physicians are involved in their preparation.

Protocols are designed to provide guidelines for medical practice. They should not be seen as obligatory rules which aim to prevent thought and initiative in taking important

* For a discussion of these terms see, for instance, Edd91b, Jen91.

decisions. The physician must retain the freedom to deviate from a protocol if he believes there are cogent reasons for doing so. In the event of a choice between medically equivalent alternatives, the patient's preference may be the deciding factor.

Apart from a means to improve the taking of decisions on the appropriate treatment, the Committee also believes protocols to be a valuable instrument in reducing the inappropriate use of additional diagnostic testing.

4.2.3 *Cooperation, consultation and review*

The quality of the medical procedures employed by the physician is highly dependent on his professional approach. Willingness to participate in consultation and collaboration, to review the work of others and to be reviewed - i.e. the willingness to receive criticism and to criticize - are characteristics of a quality-oriented approach.

The establishment of collaborative arrangements is a matter of some urgency. The Committee welcomes the recent initiative by the government to earmark funds for the reorganization of general practices to form so-called GP groups, which in addition to matters such as duty rosters will also have tasks in the area of promoting expertise, cooperation and policy development (TK91b).

The Committee is of the opinion that specialist partnerships as well, if they have not already done so, should be obliged to adopt formalized collaborative arrangements which provide for the transfer of information and for agreements on the type of patient management to be followed.

General practitioner groups and partnerships should seek to work in an atmosphere where uncertainties about their decisions, and the outcome and complications of medical practice, are open to discussion. More openness is required. Consultation on collaboration cannot be limited to the one discipline. General practitioners and specialists are still two highly distinct groups which have little idea of the methods and operation of the other. This is obviously an obstacle to communication about the condition of the patient who is the victim of such poor communication.

Consultation and cooperation between specialists from different disciplines require more attention. Interest in discussions aimed at deciding on a policy for the treatment of patients requiring a multidisciplinary approach is increasing in the hospitals. Necrological discussions, at which a joint effort is made to determine the cause of death, and consultations on X-ray photographs between the radiologist and the specialist in charge of the case are also of considerable value. Where such consultations are still ad hoc an effort should be made to introduce structured multidisciplinary consultation. Interdisciplinary consultation is also essential to reaching good agreement about delineating areas of competence.

The cooperative and consultative arrangements referred to provide a good basis for internal evaluation, which is essential. In addition to this the Committee also believes external evaluation to be indispensable. It believes that medical audits of partnerships and general practitioner groups by independent practitioners of the disciplines concerned should be urgently promoted by the professional associations and/or their quality committees. Auditing which at present, with the exception of a few disciplines, is restricted to those involved in training and to teaching clinics, must be expanded to become an operation involving all physicians and all institutions. The medical auditing procedure must place the emphasis on the assessment of the outcome of the medical policy of the physician or body under inspection.

The Committee also advocates the introduction of examinations for the re-registration of specialists and general practitioners, since it believes that re-registration should be based on an independent assessment of the current competence of the physician.

4.2.4 *Training and in-service training*

The basic medical curriculum and supplementary training process are insufficiently adapted to the needs of the 'ideal medical practice' dictated by the norms of the present day.

The clinical epidemiological approach should be a part of the training process from the very first stages. Professional training should not be limited to theoretical lectures. The aim must be to teach future doctors responsible decision-making and this can only be learned by applying in practice the knowledge they have acquired.

The Committee attaches great importance to instilling in young doctors an appreciation of the factor of quality (RGO90). The future physician must be confronted throughout his training with the realization of the importance of this aspect of the profession. The best way to ensure that this occurs is to allow the trainee to experience its value at first hand. This also implies that teachers must include explicitly in their training programmes the evaluation of treatment, working with protocols, peer consultation, willingness to participate in review procedures and the ability to treat the patient and his family with understanding and respect; that they must also ensure that trainees are given responsibilities in this area (Ste90, Thi91) and, last but not least, that they themselves provide an example in this respect. It should become a matter of routine for graduate trainees and their teachers, by way of example, to offer and receive criticism, to discuss patients and colleagues in a respectful fashion and to consult and collaborate closely with them.

In order to improve communication between primary and secondary health care, general practitioners and specialists should be confronted constantly during their training

with eachother's area of endeavour. Most GP training courses now include an obligatory clinical traineeship. It would be advisable to include a traineeship in general practice as part of the training of future specialists, as is the case in Britain.

Cost-effectiveness and management skills should also form part of the training package. The National Specialists' Association (LSV) has already introduced management courses in refresher training programmes for practicing physicians.

Responsibility for keeping up-to-date in his profession lies primarily with the individual physician. He must keep abreast of developments in his field through a study of the literature, participating in courses and attending the professional meetings of his professional association. The last-mentioned activity will also allow him to exchange ideas with colleagues from outside his own group practice or partnership.

In view of the rapid advances in knowledge at present as well as the growing range of medical possibilities, in-service training can no longer be allowed to be an informal matter. The Committee believes that attendance at refresher courses should be a requirement for re-registration, with credits being awarded for such activities, a system currently being developed in the field of internal medicine.

4.2.5 *The delineation of tasks*

The Committee is aware that the borderline between specializations is not always clear-cut. All physicians may carry out all procedures, and this in itself provides a sound stimulus. The Committee is opposed to a strict delineation of the area of competency of every specialization; a far better alternative would be to lay down clear requirements regarding the expertise and experience of specialists wishing to perform certain procedures.

Should problems nevertheless arise about the practice of the same procedure by competent specialists from different disciplines (who is allowed to do what and to what extent), local agreements should be reached in the matter *. As long as the interests of the patient are paramount, these arrangements can achieve a great deal.

However, the type of 'territorial conflicts' which arise when different types of specialists provide divergent treatments for patients with the same disorder are a more knotty problem. In resolving conflicts of this nature, the deciding factor should be data based on effectiveness research (if possible interdisciplinary) (IOM89, Edd90c). The starting point must always be the interest of the individual patient.

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* The Committee would refer here to the type of arrangements set up by neuro-surgeons and orthopaedic surgeons in hospitals where they both work.

4.2.6 *Professional manpower planning*

Manpower planning in the Dutch medical profession is largely concentrated in the hands of the professional associations of the various groups. The system appears to be in need of review. The Committee believes that more external influence, as seen in neighbouring countries, is essential.* It favours the introduction of a central body along the lines of that in operation in Britain, whose members are independent experts able to assess the training capacity of the various specializations in complete impartiality.

The Committee would suggest that the State Secretary should give serious consideration to the way in which an external element can be introduced into the planning of the professional manpower capacity available in the various disciplines.

4.2.7 *The introduction of new procedures*

In the view of the Committee this should be done with more care (WVC91). It recommends the abolition of the criterion of 'professional usage' and the use of that of proven effectiveness in assessing whether or not a procedure is eligible for reimbursement.

The Investigational Medicine Programme developed by the Health Insurance Funds Council is meeting a clear need in this regard, although it operates on a small scale as yet. All new technologies, be they diagnostic or therapeutic, should be subject to an evaluation procedure, but this need not take place within the strict confines of a project on development medicine. This is an area where the professional associations could perform a useful service. They too must supervise the introduction of new methods by evaluating them, or having them evaluated, on a small scale in the practical situation and providing an indication area. On the basis of the results obtained it can then be ascertained whether the procedure should be introduced generally or on a restricted basis and if it is to be introduced, an indication given of the requirements to be met by physicians and institutions.

This type of 'shopfloor technology assessment' is expensive and time-consuming. However, the advantage of this method in combination with the stringent application of proven effectiveness as a criterion for reimbursement by insurers is clear: practitioners are discouraged from immediately rushing to try every new method so that each new procedure, whether effective or not, is introduced without question.

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* The National Advisory Council for Public Health also advocates external consultation in professional manpower planning, as may be seen from its views contained in a report published as the present publication went to press (NVR91).

4.2.8 *The concentration of facilities*

The evaluation of the outcome of complex procedures which are seldom used must receive priority. In the case of procedures demanding a high degree of skill and experience, thought must be given to aspects such as the extent of application, availability and standards required of physicians and hospitals offering such facilities (such as a minimum number of patients with the disorder in question each year and standards of skill).

A more flexible application of hospital budgets is a pre-requisite for achieving concentration in practice. If sound arguments can be put forward for the concentration of a specific facility, this must be accompanied by the modification and possible redistribution of hospital budgets. In fact, the system is already in use with regard to facilities which come under section 18 of the Hospitals Act (WZV): the designated hospitals receive a permit and possibly additional funding, while other hospitals do not.

In introducing new procedures careful thought must be given to whether concentration or distribution on a large scale is the method of choice. Recommendations on the distribution and concentration of facilities are made regularly in the reports prepared by the Health Council. If these recommendations should fail to be adopted 'spontaneously', it would be advisable for the government to take measures, for instance by giving section 18 of the WZV a wider application.

4.2.9 *The patient*

It is essential that the public should be provided with clear information on illness and health and medical possibilities and limitations. In addition to the advantages of new medical developments they should also be informed about the side effects, complications and failures of procedures (Lee91, WVC91). This would provide a fertile terrain for health education programmes (GVO).

Strengthening primary health care, a process which is developing well, is of vital importance. The general practitioner is the obvious person to furnish the patient with objective information and to warn about the downside of medical over-consumption.

Finally, the professional associations, insurers and government should reach agreement with each other about the exact nature of consumer medicine, i.e. care which is not absolutely essential.

4.2.10 *Financial incentives*

The Committee advocates that the system of remuneration for medical procedures should be so set up that sound medical practice is rewarded at least as well, if not better, than lesser methods, irrespective of the type of health care system introduced for the future. Means to this end include improving remuneration for taking patient histories, the physical examination and talking to the patient, and the inclusion of certain types of diagnostic assessment in the referral package. Health insurers have already made a start with the last of these. The Committee considers it desirable that this development should be accelerated and that the medical profession should cooperate.

The translation of the outcome of interdisciplinary and other effectiveness research into financial incentives can also help to resolve 'territorial conflicts' and contribute to the implementation of plans for the concentration of facilities, although this will be no easy task.

A further elaboration of this section falls outside the mandate and competence of the Health Council.

4.2.11 *The role of government*

Government policy is geared to a withdrawal from an active role in health care. The Committee questions whether such a policy, which lays a great deal of responsibility at the door of the health care institutions, is wise at the present juncture. It believes that the regulation of exceptional technologies should remain the preserve of government and would find it regrettable if current policy under section 18 of the WZV, which has convincingly proved its worth, were to be discontinued.

As mentioned earlier, government has a role to play with regard to basic medical education and training and further training (4.2.4), professional manpower planning (4.2.6), the introduction of new technologies (4.2.7) and the concentration of facilities (4.2.8). Moreover, refresher training and the re-registration of physicians (4.2.3, 4.2.4) and the establishment of quality committees within the professional associations (4.2.1) should be made obligatory, for instance under the Individual Health Care Professions Act (BIG) or the forthcoming legislation on quality.

The Committee believes an active and well-equipped State Health Inspectorate ('Staatstoezicht op de Volksgezondheid') to be indispensable in the monitoring of compliance with the rules of sound medical practice even in cases where such rules are not explicitly laid down by law, but that implementation should be in the hands of the medical profession, in accordance with the government recommendation contained in its policy document on quality and care (TK91a). The Committee recommends that the

State Secretary should adopt timely measures if the process of quality improvement by the medical profession itself does not appear to be progressing satisfactorily.

The Committee realizes that choosing for change is no easy task. Not only changes of a practical nature are involved but it is also, principally, a question of a change of approach throughout the medical profession. This will require time and effort. The Committee nevertheless assumes that physicians are willing and able to accept such a challenge.

The Committee would point out once again that the changes it is advocating cannot be achieved by the medical profession alone. The role pattern of the patient must also undergo a change. Finally, by the way in which it reforms the health care system, the government too can contribute to the resolution of the problems indicated by the Committee.

For the Committee

The secretary	The chair
Dr Y A van Duivenboden	Dr E Borst-Eilers

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Annexes

Annex **A**

Request for a report

In a letter of 11 September 1989, no. DGVGZ/Stabo/JM/U-00136, the State Secretary for Welfare, Health and Cultural Affairs requested the Health Council to make recommendations on the limits to health care. The letter read as follows:

As noted in the Statement of the Government's Views on the Limits to Health Care, the existing insurance package will be revised where this is possible and deemed necessary. This revision is needed in order to remove unnecessary, marginally effective and/or inefficient elements from the package. In this context I would refer to Specific Policy Proposals no. 3 mentioned to on page 24 of the Statement of the Government's Views on the Limits to Health Care (Parliamentary Documents II, 1987-1988, 206620, no. 1-2).

The first question which arises is which procedures could be eligible for further evaluation. On 8 February 1989 I requested the Health Insurance Funds Council to examine this question and to arrange the commencement of assessment procedures. I also requested the establishment of a ranking order with regard to the types of care designated for such assessment. A copy of this request is included here for information purposes. I anticipate that you will consult with the secretariat of the Health Insurance Funds Council with a view to coordination with its recommendations.

The next step is to establish the level of scientific advancement of the procedures selected. I should be grateful to receive the opinion of the Health Council on this aspect. It may well be that in this light you will conclude that the current state of scientific development in some areas provides an insufficient basis for assessment and that further evaluation is required. In that event, I would request you to inform me which are the relevant themes and issues and what would be the most appropriate avenues of approach. With regard to the last-mentioned aspect I would advocate the following.

The method of assessment will vary in accordance with the topic concerned. In some cases it will involve the formulation of a consensus opinion on the most appropriate or correct use of a certain procedure. Since in the use of a medicine, for instance, the indication may have been widened before its validity was demonstrated, further research will be required prior to the establishment of an indication limit.

In the case of some procedures it may still be necessary to conduct patient-oriented evaluation research. Should this be the case, the research could take place in the framework of development medicine.

With regard to the foregoing, I would request you to advise on which existing procedures should be limited in their use or withdrawn from use in view of technological advances. I would expect that in doing so you would make use of the information which I requested from the Health Insurance Funds Council.

Once you have established the appropriate use of a particular procedure, the next step will be to determine how appropriate use can be achieved in practice. In other words, how should inappropriate use be prevented or countered? Existing and future initiatives developed by the various professional groups can be of great importance here. I am thinking in particular of protocols which have been drawn up jointly, the drawing up of standards for professional skills, the division of services over different levels, in short a series of practical measures designed to standardize, monitor and promote quality.

I would ask you to advise me on ways in which the Government can support moves initiated by the medical profession.

The State Secretary for Welfare, Health and Cultural Affairs,
(signed)
DJD Dees

Annex to this letter

Request for a report directed to the Health Insurance Funds Council on 7 February 1989, no. VTA/VERZ/VE-407353, by the State Secretary for Welfare, Health and Cultural Affairs concerning the factors limiting the growth of the health insurance package. The letter read as follows:

1. On 24 April 1986 the Health Insurance Funds Council published its final report on the limits to the growth of the health insurance package (Health Insurance Funds Council, publication no. 319). In this report, which played a major role in the formulation of the Government's Views on the Limits to Health Care (Parliamentary Documents II, 1987-1988, 20260, no. 1-2), the Council set out its final opinion that the lack of financial means in health care will necessitate the making of choices. In view of its mandate and field of operations, the Council naturally took as its principal starting point the way in which the extent of the health insurance package is determined. The Council indicated that it advocates the

development of criteria at the central level which can be used to decide whether a procedure or some form of care is to be included in the package. The second point of departure set out by the Council in its report is the desirability of breaking the automatic nature of inclusion and arriving at a more rational form of decision making on the inclusion of new technologies in the health insurance package than have been employed hitherto. The approach to new developments advocated by the Council in its report has been adopted in the meantime. The procedure created for development medicine is of particular importance here. The drawing up of recommendations - and the preparatory steps preceding this - on heart and liver transplants and in vitro fertilization provide a good example. Medical technology assessment also plays a major role in the preparation of such recommendations, as has been seen with regard to recommendations on heart and liver transplants. The method is not only of use to the compulsory insurance scheme and the cover for exceptional medical expenses. It is also essential for private insurers to ensure that cover is only provided for forms of care whose cost-effectiveness has been demonstrated. It would therefore be advisable for the Council to examine, as is suggested in the report, whether co-financing by these insurers would be feasible. A similar situation may also occur with regard to other organizations. The Council also refers to this matter in its report.

2. In the final report referred to above, the Council also discussed existing services and treatments already included in the package. It points out that the emphasis given in the report to new and expensive developments in medicine does not mean that the present range of services and treatments will necessarily be excluded from a reappraisal of cost-effectiveness. In this context it should be borne in mind that both the policy document 'Change Assured' and the Government's Views on the Limits to Health Care pay particular attention to the present package of services and treatments, stating that this too should be examined critically with special emphasis on aspects such as effectiveness, efficiency, the relationship with other services and treatments (substitution possibilities) and so on. The starting point taken by the above documents was that the existing range, where this is possible and necessary, should be revised in order to remove unnecessary, ineffective and/or inefficient elements from it. On the one hand this can make way for new types of care and on the other it will ensure a package compiled in a balanced and responsible fashion which offers a sound basis for the future as well.

In the light of the foregoing, I would request the Council to investigate which elements of the package it would be advisable to reassess in this way and to have the reassessment carried out. It goes without saying that in compiling a list of services and treatments eligible for reassessment the Council will indicate an order of precedence.

In the report we have been discussing the Council proposed a method for breaking through the present automatism, thus allowing improved management - with regard to new developments - of the range of services and treatments offered. As the foregoing indicates, I concur with this approach, while pointing out that as I indicated earlier it is essential that the same method should also be applied to the existing range. It is equally important to develop a range of statutory instruments so that, where possible and where it is desirable, certain services and treatments may be excluded and, in the case of new

developments, prevented from being included automatically in the package. The development of standards for professional skills should also be given consideration. In addition, as the Council indicated in its report, the use of agreements as an indirect method of influencing the use of costly techniques or types of care is also important.

I would request the Health Insurance Funds Council to make recommendations to me as well on the implementation of such a range of instruments; it would be important to ensure that they are introduced without an unnecessary regulatory burden. I am aware that this is in itself no easy task. In all probability the issue can only be resolved if more emphasis is placed on self-regulation by the medical profession and recourse is had to the agreement as an indirect instrument in the management of the health care package.

I should be grateful to receive your recommendations with regard to the above-mentioned aspects.

The State Secretary for Welfare, Health and Cultural Affairs,
(signed)
DJD Dees

Annex **B**

Members of the committee

The Standing Committee on Medicine (the Committee) of the Health Council comprises the following members:

- Dr E. Borst-Eilers, *Chair*
  Deputy President of the Health Council
- Professor HKA Visser, *Deputy Chair*
  Erasmus University, Rotterdam
- Professor J Bennebroek Gravenhorst
  University of Leiden
- Professor JE Blanpain
  University of Louvain
- Professor LHDJ Booij
  Catholic University of Nijmegen
- Professor FJ Cleton
  University of Leiden
- Professor H van Crevel
  University of Amsterdam
- Professor K Gill
  Emeritus Professor, University of Leiden
- Professor JM Greep
  University of Limburg

- Professor PJ Hoedemaeker
  University of Leiden
- Professor A Hofman
  Erasmus University, Rotterdam
- Professor J Huisman
  Erasmus University, Rotterdam
- FCA Jaspers
  Combined Doetinchem Hospital (Stichting Doetinchemse Ziekenhuizen)
- Professor RAP Koene
  Catholic University of Nijmegen
- Professor S van der Linden
  University of Limburg
- Professor AE Meinders
  University of Leiden
- Professor JC Molenaar
  Erasmus University, Rotterdam
- Dr JM Pekelharing
  Diagnostic Centre, Delft Hospitals Collaborative Foundation
  (Stichting Samenwerkende Delftse Ziekenhuizen)
- Professor FFH Rutten
  Erasmus University, Rotterdam
- Professor P Schnabel
  Netherlands Centre for Mental Health, Utrecht
- Dr JM Thijssen
  Catholic University of Nijmegen
- J Verhoeff, *adviser*
  Medical Chief Inspector of Public Health,
  Ministry of Welfare, Health and Cultural Affairs (WVC), Rijswijk
- Professor PFGM van Waes
  University of Utrecht
- Professor T van de Werf
  Catholic University of Nijmegen
- Dr YA van Duivenboden, *Secretary of the Committee*
  Secretary of the Health Council

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